

Interview – Dr. G. S. Sunil

I am Dr. G. S. Sunil and I am a Professor of the department of Paediatric and Congenital Heart Surgery at Amrita Institute of Medical Sciences, Cochin. I am working here from 1998. I am mainly doing complex congenital heart surgeries.

What are the complexities that have been observed in the 5000 paediatric cardiac surgeries?

These children are born with various kinds of heart defects. At one end, you have a very simple problem hole in the heart or the narrowing of the valves or one of the heart vessels. On the other extreme, you have a heart with one chamber which is deficient. That means instead of four chambers there are only three chambers or two chambers. So these are at the extreme end of the complexities. In between, you have a slightly moderate complex problems. The treatment of these problems also differs. If here is a simple problem like a hole in the heart, we fix it and mostly that is cured for life. They have normal longevity and it is mostly the one stage surgery whereas a complex heart problem like the absence of one chamber, where you need various surgeries at various stages of life. First stage, second stage, the third stage and even then you will not be able to create a chamber that is absent. What you can do is to create some adjustments in the circulatory system so that they can lead a more or less normal life. These complex problems, even if you fix they probably have less longevity than the normal population. So these are the variations you encounter in different kinds of heart disease.

What are the surgical challenges that you see?

Surgical challenges as such in cardiac surgery is more challenging than many other specialities. So it because the heart is an organ that beats all the time. To perform a surgery, we have to stop the heart and the heart beating is essential for each and every second of your life. We need some kind of arrangements so that the body is perfused when you stop the heart. That is one aspect of the surgery. It is a very challenging thing. When you open the heart and do these procedures. See when we operate on small and newborn babies when the birth rate is low the structures are very small and the

working space is very less and the tissues are very feeble and those things add on to the problems. Another aspect will be that before surgery they will be in very bad shape, like they have sepsis and multi organ dysfunction, those kinds of procedures even if your surgery went very well you may not have a good outcome after surgery.

What does it take to produce international results and how is Amrita a differentiator in this vertical?

One is very good infrastructure is needed to produce a good outcome and the other thing is that the quality of the doctors, that is very important. The third thing is it is a teamwork, you have different specialities involved in the care of the cardiac surgery patient. Firstly, the cardiologists come into the picture. They are the people who diagnose this problem and confirm it and discuss with the surgeons and formulate a surgical plan. Then the surgeons actually do the technical aspect of this work. So that has to be implemented in a very good manner. There also, it is not only the surgeon's job, you need a perfusionist, anaesthetist, everybody is needed. When the surgery is over the third phase will be there. The third phase is the post-op care. So there are doctors, anaesthetists, and nurses are very important. With that only can we achieve a good outcome. So luckily, we have very dedicated people in the hospital so that is the reason for the outcome. We are lucky to get a majority and are able to get a comparable result with very good centers with the world.

How does this compare to the global standard and the medical tourism where patients come from outside India?

We are operating on many people from abroad from places like Afghanistan, Sri Lanka, Maldives. We also get patients from many states in India because Kerala and the hospital are providing very good care, so patients from many states from India are operated on. In the future, we don't know whether we can get cases from the European countries or the West but our results are comparable to them and are cost will be very much less than the American or the European centers.